I claim:

1. An article comprising at least one containment means comprising pressurized gas-filled microbubbles, said gas being controllably releasable on demand by fracturing said microbubbles.

2. The article according to claim 1 wherein said containment means comprises an adherent layer on a support.

3. The article according to claim 2 wherein the gas-filled microbubbles are bonded to said adherent layer.

4. The article according to claim 1 wherein said containment means comprises a porous web.

5. The article according to claim 1 wherein said gas-filled microbubbles are incorporated within the containment means.

6. The article according to claim 1 comprising free-flowing gas-filled microbubbles.

7. The article according to claim 6 wherein said free-flowing microbubbles are contained within at least one holder.

8. The article according to claim 1 wherein said gas is a reductant gas.

9. The article according to claim 8 wherein said gas is hydrogen.

10. The article according to claim 1 wherein said gas is an oxidant gas.

11. The article according to claim 10 wherein said gas is oxygen.

12. The article according to claim 1 wherein said containment means comprises a polymer.

13. The article according to claim 1 wherein said microbubbles have shells made of a material selected from the group consisting of glasses, ceramics, and metals.

14. The article according to claim 1 wherein said gas in said microbubbles is at a pressure in the range of 0.69 to 138 MPa.

15. The article according to claim 13 wherein said shells of said microbubbles have average thicknesses in the range of 0.01 μm to 20 μm.

16. The article according to claim 1 wherein said gas-filled microbubbles have average sizes in the range of 1 to 1000 μm.

17. The article according to claim 1 wherein said gas is released by fracturing means selected from the group consisting of mechanical, thermal, and acoustic means.

18. The article according to claim 17 wherein said mechanical means comprises compression and shear forces.

19. The article according to claim 1 which is in the form of a roll of tape.

20. The article according to claim 9 for supplying hydrogen to an electrochemical power device.

21. The article according to claim 11 for supplying oxygen to an electrochemical power device.

22. The article according to claim 20 wherein said electrochemical power device is selected from the group consisting of fuel cells, thermal generators, and chemical batteries.

23. The article according to claim 21 wherein said electrochemical power device is selected from the group consisting of fuel cells, thermal generators, and chemical batteries.

24. A method of delivering a gas at a controlled rate comprising the steps of:

a) providing an article comprising at least one containment means comprising pressurized gas-filled microbubbles, said gas being releasable on demand by fracturing, and

b) subjecting said pressurized gas-filled microbubbles to a means for controllably releasing said gas from said microbubbles at a controlled rate by fracturing.

25. The method according to claim 24 wherein said article comprises gas-filled microbubbles heat-bonded to a tacky emulsion as the containment means.

26. The method according to claim 24 wherein said article comprises gas-filled microbubbles bonded to a coated wet emulsion prior to drying.

27. The method according to claim 24 wherein said article comprises a bonding layer between a layer of said gas-filled microbubbles and said containment means.

28. The method according to claim 24 wherein the containment means of said article comprises a homogeneous softenable or reactively bondable material for adhering to said microbubbles.

29. The method according to claim 24 wherein said containment means of said article comprises a network of fibers applied to gas-filled microbubbles.

30. The method according to claim 24 wherein said containment means of said article comprises a holder for free-flowing gas-filled microbubbles.

31. An apparatus for delivering gas at a controlled rate comprising

a) an article comprising at least one containment means comprising pressurized gas-filled microbubbles, said gas being releasable on demand,

b) a means for causing release of said gas from said microbubbles by fracturing, and

c) a feedback and control means for releasing gas to an electrochemical power device at a controlled rate determined by a load.

32. The apparatus according to claim 31 wherein said feedback and control means comprises at least one of a load sensing device, a reference signal, a motor controller, a fracture release mechanism, an electrochemical power device, and a starting battery and circuit.

33. The apparatus according to claim 31 wherein said electrochemical power device is a fuel cell.